Example of a CEMB Applicant Profile

**Name:** Klem Kadidlehopper

**1. State your long term career goals relating to educational degrees (MS, PhD, post doctoral) and future job placement (location, academia, industry, health, government, etc.).**

My career goal is to become a research faculty member, preferably at a European University. Currently I am completing my BS degree at the University of Fakedata. I am applying to the Cell and Molecular Biology program to pursue a PhD.

**2. Describe your major areas of research interest. Be specific for types of organisms (bacteria, fungi, plant, insect, vertebrate, etc.) and types of research (genetics, biochemistry, engineering, nutrition, agriculture, physiology, etc.). If your interests are very broad, then state the areas in which you are NOT interested to work.**

Currently I have experience with animal cell culture, microbiology, gel electrophoresis, DNA isolation, and PCR. Part of my training was during a 6-month internship with Dr. Fillup A. Beaker at Cells-R-Us Corporation. I was fortunate to get this internship because there were more than 30 applicants and I was the only person accepted. My experiences during that internship included: growth of Hela cells, culture maintenance, media preparation, cell transformations, and FACS analysis of the transformants. During my undergraduate work at the University of Fakedata, I have been conducting an honors research project in the laboratory of Dr. C. A. Bacillus, where I have cloned a phytase gene from Lactobacillus sp. isolated from the rumen of a cow. The gene was amplified by PCR and cloned into an expression plasmid. Under direction of a Ph.D. student, we were able to show that the E. coli clone was expressing a 110 kdalton protein as expected. This project gave me experience in DNA isolation, PCR, gel electrophoresis, and bacterial culture work. I believe these experiences have prepared me to be a productive member of a research team.

My main areas of interest are plant molecular biology, ands pathogenic microbiology. However, I also would be interested in research opportunities in protein biochemistry, and immunology, since these are important aspects of pathogenesis.

**3. Describe your past laboratory/research experiences. Distinguish laboratory coursework from true research experiences. Include equipment and techniques with which you are familiar.**

Most of my course work has been in the area of microbiology and molecular biology, but I have taken some courses in plant physiology and plant molecular biology. Part of that interest is because I grew up on a cassava farm and got to see first-hand the impact of bacterial and fungal diseases. That is why I have a keen interest in molecular processes underlying the interactions between plants and their pathogens.

**4. List the CEMB faculty (**[**https://cell.uark.edu/program-faculty-research.php**](https://cell.uark.edu/program-faculty-research.php)**) with research programs you are most interested in joining, and those with research programs you are somewhat interested in joining.**

I have reviewed the faculty research projects on the Cell and Molecular Biology website and know that I would be interested in exploring possibilities for the projects in the laboratories of

Drs. Drivel, Dogma, Buffoon, Larry, Moe, Curly, and Yiatpos.

I would like to add that my interests in cell biology are much wider and would be interested in many other opportunities.